

SECTION A

On each map that you come across there are drainage features and relief features.

Drainage Features

Each map has drainage features on it and these need to be shown on the sketch map. Mostly on section A you are number 1 you are not tested on sketch section and sketch map but here my concentration is on sketch map.

Whatever map you are asked to draw has its own drainage features and there are the main 5 drainage features which are always present on whatever map it maybe and these are.

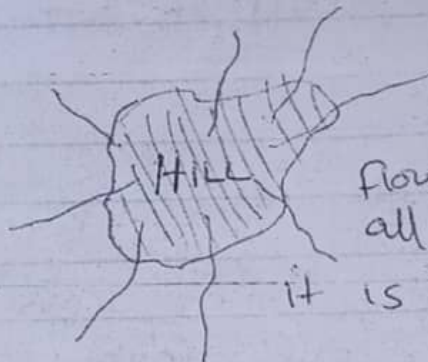
- 1* Main River(s) and direction of flow (at least 3 rivers should be shown on a map)
- 2* Channel features (Braids, waterfalls, and rapids)
- 3* Angular bend / straight channel
- 4* Drainage patterns (Dendritic, Radial, sub parallel)
- 5* Discordant Drainage (Gorge)

Some important notes about the above.

The main river must be shown as well as its direction of flow ~~at least~~ the channel features should also be included at least each feature should be represented twice.

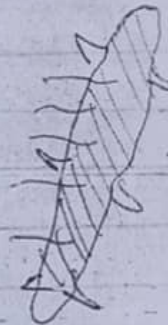
You should show the 3 drainage patterns I have stated above anything outside the box is ~~WRONG~~ If there they are not shown don't stress leave them out

Radial drainage is where there is a feature like where rivers are radiating from the top of the relief feature flowing down the feature in all the directions. where it is not like so it is not a



radial drainage.

- Sub parallel is where rivers are on the steep side of a relief feature as shown above.



That's sub parallel drainage where rivers are coming from the steep feature side by side.

Dendritic drainage is found in low lying areas it is NEVER found on the top of a high land.

Other drainage features which you might show if they are present are *

* marshes

* pans

* disappearing streams but in

Zam they are mostly found in Chiriqui due to the presence of limestone. In Vic Falls it is because of weak unconsolidated material

* Intermittent streams

* High or low drainage density

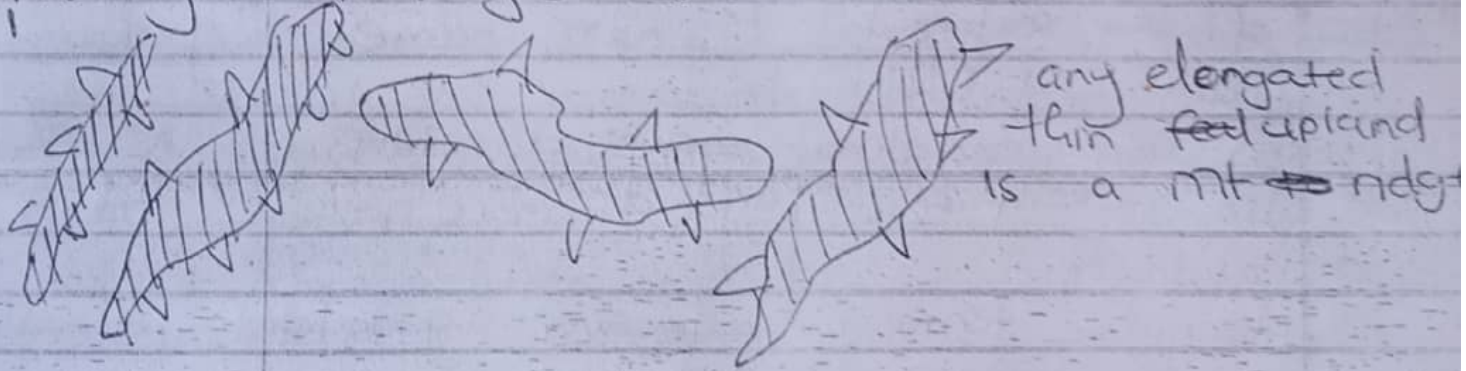
Moving onto relief features, Each map text you will come across has the following features and these features MUST be shown on your sketch map these are

1. Pediplain
2. Hill
3. Scarps
4. Uplands

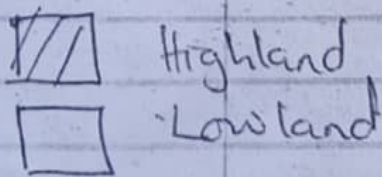
Mountain Ridge

NB In Zim there is no a central hill. An upland which you are confused on how to name if you may call it an upland, hill, mt Ridge, mt range, mt. Repeatability is no big deal because that is what you are seeing.

Mostly mt ridges are shown as



- Each Map has a key *
- What should appear on your key first is



What follows is ⇒ DDP - Dendritic Drainage Pattern
RDP - Radial Drainage Pattern
SubPDP - Sub parallel Drainage Pattern

AAA - Scarps

→ - Direction of flow.

* Everything not shown on this key ^{must} be found on the sketch map. Do not add to the key.

After drawing you are asked to do is to describe the relief and drainage features

Relief features

- Pediplain
- Hills
- Scarps
- Uplands
- mt Ridge / range

* NOTE * Effective description begins by naming the following should be in every paragraph

- ① Name of the feature and its relief name e.g. Tsanzuani and hill
- ② Location using cardinal ~~points~~ directions e.g. North and also use 4 figure grid difference including grid boundaries
- ③ Use descriptive terms e.g. adjectives e.g. isolated, dissected

a) Pediplain ÷ Extensive / narrow / dipping gently pediplain / dipping gently towards a certain river

b) Hill ÷ Isolated / Residual
form of an Inselberg Resistant to erosion

c) Ridge ÷ Dissected / flanked by scarps / flat topped ridge (trenching from SE to SW) / Peripheral ridge

d) Upland ÷ dissected / Rugged / flanked by slopes

e) Smooth rock ÷ Bare rock surface

FOR EXAMPLE

There is a residual hill named Tikwini to the N.E of Rusape bounded by vertical grid lines 06-08 and horizontal gridlines 37-38.

SKETCH SECTION

- A sketch section is a section showing important changes in height or altitude.

Qstn

[SHAMRA MAP]

* Draw a well annotated sketch section showing changes in relief along line, starting from gridlines 420210 and 540730

Procedures

- Firstly locate the 2 points first
- Join the 2 points using a straight line
- Draw your sketch section labelling height (m) on Y axis and the start and end points on X axis (A or B)
- Make sure you note well the levels of all pediplains and heights of uplands

Qstn

* Describe and explain the major changes or variations along the sketch section [8]

NB: In your description start describing from the left hand side through to the right hand side.

e.g. On the western side of the section there is a dissected Mt called Matafunwa. This could have been formed by volcanic ~~erupt~~ intrusions of more resistant rocks. magma was intruded and solidified below the earth's surface and there was stripping of regolith leading to the exposure of the landform Matafunwa Mt.

Form How landforms were formed

- * Pediplan ÷ pediplanation (scarp retreat) or was becoz of soft easily erodable rock
- * Hill ÷ Volcanic ~~intrusion~~ intrusion of more resistant rock formed by pediplanation, exhumation, resistant rock
- * Upland / Ridge / Mt range ÷ Same as for hill
- * Scarps ÷ Parallel scarp/slope retreat by the main river
- * Negative Summital Relief ÷ Volcanic Intrusion which formed the lopolite. Then due to down wrapping of the lava it was exposed taking the shape of the lopolite, which is saucer shaped.

Describing Drainage features on a map

- Here there is a different scenario, descriptive terms/statements or adj. (adjectives) are not a must but location of them is a must (using 4 fig grid reference) e.g. There are several rapids along Rusape river grid 9933. There are also several bards on Rusape ^{along} river in grid square 4342
- * All drainage features should be shown using 4 fig grid ref.

EXPLAINING & DESCRIBING DRAINAGE FEATURES

- A]
- 1) Main river(s) and direction of flow ÷ e river is flowing from the E to W following the natural dip/gradient of the land
 - 2) Rapids ÷ These are heterogenous rocks where hard rocks overlie soft rock
 - 3) Waterfall ÷ Is the same with rapids
 - 4) Braiding ÷ This form when there is a reduced gradient leading to the reduced velocity and localised deposition on the river bed
 - 5) Angular bends ÷ Formed due to structural control where the river follows fault lines
 - 6) Straight channels ÷ follow fault lines
- B]
- 7) Radial Drainage Ptn ÷ - Domical upland
 - 8) Sub parallel ÷ - Steep slope
 - 9) Dendritic Drainage Ptn ÷ Uniform homogenous rock and flat gradient
 - 10) Gorge ÷ When vertical erosion is taking place at a faster rate than the rate at which uplift is taking place.
 - 11) Pans ÷ Impeded drainage
 - 12) Marshes ÷
 - 13) Disappearing streams ÷ Presence of thick regolith

EXAMPLES

- There is an isolated hill on the central part of the map.
- There is a residual hill on the which is a remnant of erosion on the South Eastern part of the map.
- There is sub parallel drainage pattern on the central
- On the map there is a main river named Mazowe flowing from the West to the East following the natural dip of the land